



SEQUENCE LISTING

<110> FUJII, Tadashi
NARITA, Takao
NAKATA, Kuniho
AGEMATU, Hitosi
TSUNEKAWA, Hiroshi
ISSHIKI, Kunio
YOSHIOKA, Takeo

<120> Gene participating in the production of homoglutamic acid and its use

<130> 2001-0116A/LC/00202

<140> 09/762,230

<141> 2001-02-05

<150> JP10/232382

<151> 1998-08-05

<150> JP11/182362

<151> 1999-06-28

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<170> PatentIn Ver. 2.0

MAR 28 2003

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2

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C4
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 Tyr Glu Thr Ile Leu Ala Arg Ala Gln Gln Ala Phe Lys Val Trp Arg
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 Thr Thr Pro Ala Pro Arg Arg Gly Glu Ala Ile Arg Leu Cys Gly Glu
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 Ala Leu Arg Arg His Lys Asp Ala Leu Gly Ser Leu Val Ala Leu Glu
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atg ggc aag tcc aag ccg gaa ggc gac ggc gaa gtc cag gaa atg atc 3211
 Met Gly Lys Ser Lys Pro Glu Gly Asp Gly Glu Val Gln Glu Met Ile
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Thr Met His Ser Glu Arg Pro Gly His Arg Met Tyr Glu Gln Tyr Gln			
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Pro Leu Gly Ile Val Gly Ile Ile Ser Ala Phe Asn Phe Pro Val Ala			
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Val Trp Ala Trp Asn Ser Phe Leu Ala Ala Ile Cys Gly Asp Val Cys			
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Ile Trp Lys Pro Ser Asn Lys Thr Pro Leu Thr Ala Ile Ala Ser Met			
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C4
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*C⁴
Cmt*
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C4
Cont

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*C4
Cmt*

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<211> 510
<212> PRT
<213> Flavobacterium lutescens

<400> 10

C4  
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Gly Thr Tyr Leu Gly Asp Gly Glu Trp Ser Ser Ala Thr Gly Ala Gly
 20          25          30
Thr Ile Ser Pro Arg Asn Pro Thr Thr Gly Glu Val Ile Ala Gln Val
 35          40          45
Gln Ala Thr Thr Glu Ala Asp Tyr Glu Thr Ile Leu Ala Arg Ala Gln
 50          55          60
Gln Ala Phe Lys Val Trp Arg Thr Thr Pro Ala Pro Arg Arg Gly Glu
 65          70          75          80
Ala Ile Arg Leu Cys Gly Glu Ala Leu Arg Arg His Lys Asp Ala Leu
 85          90          95
Gly Ser Leu Val Ala Leu Glu Met Gly Lys Ser Lys Pro Glu Gly Asp

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100 105 110
 Gly Glu Val Gln Glu Met Ile Asp Ile Ala Asp Phe Ala Val Gly Gln
 115 120 125
 Ser Arg Met Leu Tyr Gly Tyr Thr Met His Ser Glu Arg Pro Gly His
 130 135 140
 Arg Met Tyr Glu Gln Tyr Gln Pro Leu Gly Ile Val Gly Ile Ile Ser
 145 150 155 160
 Ala Phe Asn Phe Pro Val Ala Val Trp Ala Trp Asn Ser Phe Leu Ala
 165 170 175
 Ala Ile Cys Gly Asp Val Cys Ile Trp Lys Pro Ser Asn Lys Thr Pro
 180 185 190
 Leu Thr Ala Ile Ala Ser Met Arg Ile Cys Asn Glu Ala Leu Arg Glu
 195 200 205
 Gly Gly Phe Pro Asp Ile Phe Phe Leu Ile Asn Asp Ala Gly Thr Ala
 210 215 220
 Leu Ser Glu Lys Leu Val Glu Asp Lys Arg Val Pro Leu Ile Ser Phe
 225 230 235 240
 Thr Gly Ser Thr Gln Val Gly Arg Ile Val Asn Gln Lys Val Ala Ala
 245 250 255
 Arg Leu Gly Arg Cys Leu Leu Glu Leu Gly Gly Asn Asn Ala Ile Ile
 260 265 270
 Leu Asp Glu Thr Ala Asp Leu Lys Leu Ala Val Pro Gly Ile Val Phe
 275 280 285
 Gly Ala Val Gly Thr Ala Gly Gln Arg Cys Thr Thr Arg Arg Leu
 290 295 300
 Ile Val His Glu Ser Ile Tyr Asp Asn Val Leu Ala Thr Leu Ile Lys
 305 310 315 320
 Ala Tyr Lys Gln Val Glu Gly Lys Ile Gly Asp Pro Leu Asp Ala Ala
 325 330 335
 Asn Leu Met Gly Pro Leu Asn Ser Pro Glu Ala Val Gln Gln Phe Leu
 340 345 350
 Ala Ser Ile Glu Lys Ala Lys Ala Ala Gly Gly Thr Val Gln Thr Gly
 355 360 365
 Gly Thr Ala Ile Asp Arg Pro Gly Asn Phe Val Leu Pro Ala Ile Val
 370 375 380
 Thr Gly Leu Lys Asn Ser Asp Glu Val Val Gln His Glu Thr Phe Ala
 385 390 395 400
 Pro Ile Leu Tyr Val Met Lys Tyr Ser Thr Leu Asp Glu Ala Ile Glu

C4
cont

405

410

415

Met Gln Asn Gly Val Pro Gln Gly Leu Ser Ser Ser Ile Phe Thr Thr
420 425 430

Asn Leu Lys Ala Ala Glu Lys Phe Leu Ser Ala Ala Gly Ser Asp Cys
435 440 445

Gly Ile Ala Asn Val Asn Ile Gly Thr Ser Gly Ala Glu Ile Gly Gly
450 455 460

Ala Phe Gly Gly Glu Lys Glu Thr Gly Gly Arg Glu Ser Gly Ser
465 470 475 480

Asp Ala Trp Lys Val Tyr Met Arg Arg Gln Thr Asn Thr Ile Asn Tyr
485 490 495

Ser Asp Ser Leu Pro Leu Ala Gln Gly Ile Lys Phe Asp Leu

500

505

510